National Park Service iBook Project: Part I - Comparative Analysis

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Author Note

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Statement of Purpose

The purpose of this comparative analysis is to review a number of existing iBooks and eBooks in

order to identify both effective and ineffective design, layout, and use of widgets, and how the

use of these elements impacts the content for the viewing audience. We intend to apply this

knowledge to generate recommendations for the project, and ultimately to develop effective,

interactive iBooks for the National Park Service.

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For our comparative analysis research, we chose the following five digital books:

- *Visit Florida Magazine* by Miles Marketing Destinations

- *Hubble Space Telescope Discoveries* by HubbleSite.org and WebbTelescope.org

- *DK Super Nature Encyclopedia* by DK Publishing

- *Modern World History: World War I* by Vern Cleary

- *Pocket Genius: Ancient Egypt* by DK Publishing

We selected these examples because we feel that they contain similar or related topics and writing tone as the subject matter supplied to us by the National Park Service, including historical matter, and matter pertaining to artifacts and their social significance.

Categories of Comparison

Our chosen categories of comparison are file format, design/layout, audience, content, and widgets. We will briefly discuss each of these focus areas and provide a general overview of our findings.

File Format. During our research, it began to make sense to consider the implications of the iBooks format compared to other digital book formats. Thoughts and research pertaining to this follow in this section.

iBooks allow for a higher level of interactivity than other eBook formats, including but not limited to .PDF and .EPUB formats. It is worth noting that it is a proprietary format exclusive to Apple products, specifically iPhone, iPod Touch, and iPad (also any computer running Mac OS X 10.9 or above, not officially released at the time of this research). According to Apple, iBooks made with the iBooks Author app and exported to the iBooks format must be made

available on the iTunes/iBooks Store. iBooks exported as other formats can be made freely

available outside of the iTunes/iBooks Store. The font size of iBooks cannot be adjusted by the

user, nor is page zoom well-supported. Although access to iBooks is technically limited to

iTunes, the process of downloading and viewing an iBook on any of the aforementioned devices

is a fairly easy and straightforward process.

        The .PDF format is viewable on and supported by an extremely wide range of devices,

but it lacks the capacity for the interactivity offered by the iBooks format. Zoom is supported in

most .PDF readers, increasing accessibility for individuals; font-size adjustment, however, is not

readily supported. This format is the best option when considering audience reach, due to its

wide support.

        The .EPUB format benefits from additional accessibility options, including but not

limited to zoom and font-size adjustment. .EPUB does not support audio or video objects, and

supports nearly nothing in terms of interactive multimedia.

        Design/Layout. *Hubble Space Telescope Discoveries* and *Modern World History: World*

War I are minimal in design, utilizing thin borders to divide content and light backgrounds that

are reminiscent of the pages of a physical book. This style does an excellent job of "fading into

the background" by not distracting from the iBook's content, instead emphasizing it, albeit in a

familiar and arguably-sterile fashion. DK Publishing's *Super Nature Encyclopedia* uses bold

design with arresting bright colors. The full-screen pages feature contrasting backgrounds that

allow modern, sleek graphics to stand out. *Visit Florida Magazine* is a dense publication, due to

the number of advertisements included therein, and uses a variety of grid-based layouts. Both

Pocket Genius: Ancient Egypt and *Hubble Space Telescope Discoveries* blend a number of these

styles, bringing together a variety of page layouts that engage the reader, lightly-colored page

elements, helpful highlights, and photo/video media that is presented in such a way that it stands

out from the text without overpowering it; the latter iBook feels more formal, due to the lack of

floating text boxes and blocks of color, and the inclusion of a two-column format. The former

uses larger text, which appears to have two results: the appearance of a children's book and a

greater accessibility for the visually impaired.

      Audience. The intended audience for any given publication often effects design and

layout choices. *Super Nature Encyclopedia* and *Pocket Genius: Ancient Egypt* are both geared

toward younger readers and, therefore, contain simple vocabulary and basic sentence structure,

as well as a wealth of photographs and other media content. *Modern World History*'s lesser

amount of multimedia and text-heavy layout indicate that it is geared more toward adults.

Hubble Space Telescope Discoveries does an excellent job of appealing to a wide audience

through use of multimedia-rich layouts with accompanying sections of educational, easy-to-read

informative text.

      Content. Interactivity appears paramount to an effective and engaging translation from

print form to digital media. Interactive elements allows readers to not only observe, but to

participate, ultimately allowing them to create their own experience. The simple option of being

able to enlarge an image of a map or timeline into a full screen view has a dramatic impact on the

level of engagement that the user experiences. As the previous section indicates, content and

audience are directly related, and each of the five examples studied excellently tailored their

content to the proper audience by means of language, layout, style, and interactivity.

Widgets. Interactivity is nearly absent in the *Visit Florida Magazine,* as it is a .PDF file. Hyperlinks, zoom, and page-turning are the extent of "interactivity," which are really accessibility options, rather than engaging or different. The four iBooks contain a wide array of multimedia widgets with which users can interact, including photo galleries, audio players, video players, oversized and full-screen photos, images with flyout text bubbles, and even 3D models. *Super Nature Encyclopedia* makes use of all of these widgets, resulting in a stimulating iBook rich with multimedia. The 3D model in *Super Nature Encyclopedia* is the only one present in our review of these five digital books and stands out as unique and interesting.

Recommendations

In light of the research and findings described, we recommend that the National Park Service

iBook(s) utilizes a full-screen page design with a variety of layouts, including the

"textbookesque" two-column layout. A contrasting design with light backgrounds seems best

suited to the subject matter and to the intended audience, indicated by the client to be anyone of

adult age. While the wide variety of widgets in *Super Nature Encyclopedia* is engaging, the

iBook as a whole is almost over-stimulating, especially to an adult audience. While a bit too

formal for our project, the engaging design and style choices made in *Hubble Space Discoveries*

are the closest example of our intended goals for the National Park Service iBook. We

recommend an iBook with these characteristics, combined with the larger font-size of the *Pocket*

Genius iBook and the interesting maps of *Modern World History.*

As a team, we are especially interested in the possibility of presenting 3-dimensional

views of objects in the collection. Creating digital 3D models of the objects is not what we

recommend; a 3D model will lack the subtle characteristics of the real objects. Instead we

suggest a 360º view of the objects. In order to do this, we will need access to a few objects in the

collection in order to take more photographs. Details regarding this idea will be further discussed

and finalized at a later date.

We also recommend that the iBook be made available in .PDF format, as well, in order to

increase accessibility and to broaden our audience. While the attractiveness and interactivity of

the iBooks format is apparent, it must be said that "iDevices" are expensive and not available to

a large number of people, thus leading us to recommend a .PDF version in addition to the iBook.

References

Cleary, Vern. *Modern World History: World War I* (Bellarmine College Preparatory, 2013),

iBooks e-book.

DK Publishing. *Pocket Genius: Ancient Egypt* [Penguin Group (USA) Inc., 2012], iBooks

e-book.

DK Publishing. *Super Nature Encyclopedia* [Penguin Group (USA) Inc., 2012], iBooks e-book.

Hubblesite.org and WebbTelescope.org. *Hubble Space Telescope Discoveries* (Space Telescope

Science Institute, 2012), iBooks e-book.

Miles Marketing Destinations. *Visit Florida Magazine* (Miles Publishing, 2013), PDF.

http://guides.milespartnership.com/wow/13/

Appendix A: Comparative Analysis Grid

Publication Details	Format	Design/Layout	Audience	Content	Widgets
'Visit Florida' Magazine, by Miles Marketing Destinations	eBook in Flash-based reader (laptop) and iOS-friendly reader	-Magazine-style -3 to 4 layouts -Conflicting designs on various pages	-Adults; interested in travel	-Travel destination articles -Advertisements -Maps -Attractions	-No widgets within publication -Widgets for turning pages, zoom
Hubble Space Telescope Discoveries, by HubbleSite.org and WebbTelescope.org	iBooks format only	-Textbook layout -Variety of layout styles (about 6 or in the sample we previewed) -"Simple" design -Contrast emphasizes images	-Young adults to adults	-Space exploration -Educational videos -Traditional, paragraph-style text -Images	-Photo galleries w/ multiple photos; respond to swipe -Crossfade slider - shifts between two photos as the slider is moved -Embedded video player
DK Super Nature Encyclopedia, by DK Publishing	iBooks format only	-Full-screen layout; no codex style -Image placement appears to be determining factor in placement of text -Modern design -Contrast-y color scheme, draws attention to images, but text is still a point of interest -Use of borders to separate free-floating elements	-Youth to young adult +	-Nature -Blocks of floating text -Infographics -Video (no sound) -Diagrams -Audio clips	-Icon images that expand into full-screen photos/ infographics -Embedded video player -Audio clips -Full-screen, oversized photos; drag to explore -3D model, rotate with swipe -Click to expand; slideshows of additional pages

Appendix A: Comparative Analysis Grid, continued

Publication Details	Format	Design/Layout	Audience	Content	Widgets
Modern World History: World War I by Vern Cleary	iBooks format only	-Traditional book layout (codex) -Light borders -Basic and simple	-Adult	-History -Geography (maps) -Scholarly tone -Infographics	-Photo galleries -Embedded video player
Pocket Genius: Ancient Egypt by DK Publishing	iBooks format only	-Organized layout -Variety of layout styles -Layout design guides the eye -White w/colored borders -Different color for each chapter -Design compliments content	-Children to young adult	-History -Geography (maps) -Educational, but easy-to-read -Floating text blocks; not chunks of paragraphs -Text usually serves to describe or elaborate on image; image-driven	-Photo galleries -Embedded video player -Some expand-to-fullscreen images